

AMENDMENT TO THE CLAIMS

Please amend claims 11, 12 and 17-23, wherein matter to be added is shown in underline and matter to be deleted is shown in strikethrough as follows:

1. (withdrawn) A connector for a circuit conducting high frequency signals comprising:
 - a) a housing including an input and an output terminal coupled to a data pathway conducting signals in excess of 1 gigahertz; and
 - b) a passive circuit defined on a cylindrical substrate coupled between said input and output terminals that exhibits a complementary impedance characteristic to that of said data pathway and comprised of at least one resistor and at least one capacitor and wherein said resistor is defined by a resistive layer that comprises a plate of said capacitor, whereby an extended range of intelligible data signals is obtained.

Claim 2 (cancelled)

3. (withdrawn) A connector as set forth in claim 1 wherein said input and output ports are connected to individual conductors of a multi-conductor cable.

4. (withdrawn) A device as set forth in claim 1 wherein said resistive layer is formed of a material selected from a class of materials including tantalum oxide, silicon dioxide, silicon nitride, or nickel chrome.

Claim 5 (cancelled)

6. (withdrawn) A device as set forth in claim 1 wherein said resistor and capacitor are coupled to one another in shunt.

Claims 7-10 (cancelled)

11. (currently amended) A connector for high frequency signals comprising:

a) a housing including ~~at least one~~ input and output ~~terminals~~ terminal coupled to ~~a cylindrical substrate containing~~ at least one data pathway ~~respectively~~ conducting data signals in excess of 1 gigahertz between said input and output terminals; and

b) a passive thin film circuit serially coupled to said input and output terminals, wherein said thin film circuit includes a resistor and a capacitor arranged to exhibit a matching impedance characteristic to the data pathway, wherein said thin film circuit comprises an elongated hollow substrate, wherein first and second elongated annular layers are concentrically deposited onto said substrate defining first and second plates of said capacitors, wherein an elongated annular dielectric layer is deposited intermediate said first and second layers and wherein a portion of one of said first and second plates defines a resistor mounted to said substrate and serially coupled to said input and output terminals, wherein said thin film circuit exhibits a predetermined impedance characteristic complementary to that of the data pathway to data signals in excess of a predetermined frequency, and wherein said thin film circuit comprises a plurality of resistors and capacitors coupled between said input and said output port, wherein said thin film circuit comprises a substrate, first and second layers defining first and second plates of said capacitors, a dielectric layer intermediate said first and second layers, and wherein one of said first and second layers defines said resistors.

12. (original) A connector ~~device~~ as set forth in claim 11 wherein the one of said first and second plates ~~layers~~ that defines said resistor ~~resistors~~ is formed of a material selected from a class of materials including tantalum oxide, silicon dioxide, silicon nitride, or nickel chrome.

Claims 13 - 16 (cancelled)

17. (currently amended) A connector for high frequency signals comprising:

a) a connector body having a housing adapted for interconnection with input and output conductors; and

b) a ~~eylindrical~~ core piece supported within said housing ~~and having a~~ comprising a substrate and a plurality of concentric layers deposited over said substrate, wherein said layers include first and second conductive concentric layers that define first and second plates of a capacitor, a dielectric layer sandwiched between said first and second conductive layers, ~~and~~ wherein a portion of one of said first and second conductive layers also defines a resistor, and wherein an impedance characteristic of said core piece matches that of said input and output conductors ~~said core piece exhibits a predetermined impedance characteristic complementary to data signals conveyed by said input and output conductors.~~

18. (currently amended) A connector device as set forth in claim 17 wherein said substrate comprises a cylindrical conductive member concentrically mounted to adjacent tubular conductors connected to said input and output conductors.

19. (currently amended) A connector device as set forth in claim 17 wherein said core piece includes an annular band of conductive material that electrically couples to one of said input and output conductors.

20. (currently amended) A connector device as set forth in claim 17 wherein said substrate comprises a tubular member concentrically mounted to adjacent conductors connected to said input and output conductors.

21. (currently amended) A connector for high frequency signals comprising:

a) a coaxial connector body having a housing adapted for interconnection with input and output conductors; and

b) an electrically conductive core piece supported within said housing and having a plurality of concentric layers including a first cylindrical conductive layer defining a resistor and a first plate of a capacitor, a cylindrical dielectric layer overlying said first conductive layer, and a second cylindrical conductive layer overlying said dielectric layer and defining a second plate of said capacitor, and wherein said core piece exhibits an impedance characteristic that matches that of said input and output conductors a ~~predetermined impedance characteristic complementary to data signals conveyed by said input and output conductors.~~

22. (currently amended) A connector device as set forth in claim 21 wherein said core piece comprises a hollow cylindrical conductive substrate containing said first and second conductive layers and said dielectric layer and wherein said core piece is concentrically mounted to adjacent conductors connected to said input and output conductors.

23. (currently amended) A connector device as set forth in claim 21 22 wherein said core piece comprises a hollow tubular substrate.